

(a) assaying a biological sample obtained from the non-rodent individual for a polymorphism which is correlated with expression of a gene, wherein the correlation has been determined by a method comprising the steps of:

- (1) fusing cells of the non-rodent individual to rodent cell recipients to form non-rodent/rodent cell hybrids;
- (2) selecting for fused cell hybrids by selecting for a first selectable marker contained on a rodent chromosome and for a second selectable marker contained on a first non-rodent individual chromosome, to form a population of fused cell hybrids;
- (3) detecting among the population of fused cell hybrids a subset of hybrids which are haploid for a second non-rodent individual chromosome which is not the same chromosome as the first non-rodent individual chromosome and which was not selected;
- (4) analyzing said subset of hybrids to detect a polymorphic marker on the second non-rodent individual chromosome;
- (5) assaying for expression of a gene on the second non-rodent individual chromosome; and
- (6) identifying the polymorphic marker as correlated with expression of the gene if the subset of hybrids comprises the polymorphic marker and the gene is expressed in the hybrids or identifying the polymorphic marker as correlated with reduced expression of the gene if the subset of hybrids comprises the polymorphic marker

and expression of the gene is reduced in the hybrids; and

(b) selecting a medical intervention based on the presence or absence of the polymorphic marker in the biological sample.

72. (new) The method of claim 71 wherein the medical intervention is a prophylactic intervention.

73. (new) The method of claim 71 wherein the polymorphic marker predisposes the non-rodent individual to a disorder.

74. (new) The method of claim 71 wherein the polymorphic marker is causally related to a disorder.

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conv*  
75. (new) The method of claim 71 wherein the polymorphic marker is associated with responsiveness to a drug and wherein the medical intervention is administration of the drug.

76. (new) The method of claim 71 wherein the polymorphic marker is associated with resistance to a first drug useful for treating the disorder and wherein the medical intervention is administration of a second drug useful for treating the disorder.

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Respectfully submitted,

Date: 2-20-02

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